"Jeb..Bateman"@fakeaddress.net on 10/19/2001 12:42:51 PM

RECEIVED

To: cc: ser@notes.ymp.gov, bonnie.fogdall@notes.ymp.gov

OCT 19 2001

Subject: SER Comment

Part of Records Package / Supplement / Correction

October 19, 2001 12:42:51
IP address: 63.237.193.130
> Commentors Name: Jeb Bateman> Organization:> Position:
> The Commentors Address:>> ,
> Email Information:> jeb@ocha.net> Add commentor to the mailing list : no
> Contact Information:> fax number :> phone number :> organization :> position :
> Comment Text : In 1996 as a Mechanical Engineering student at the University of
Nevada, I did a study on Yucca Mountain with a group of fellow
students as a class project. The bulk of disturbing information I
found in a short amount of time was difficult to handle. I became
depressed by the sad state our world has fallen to under the

I will give specific comments on the DOE Science and Engineering Report for Yucca Mountain, and the "draft" Environmental Impact Statement; but first I would like to recall a few of my findings from our

irresponsible actions of the Nuclear industry.

First, it should be noted that the DOE is named incorrectly. The responsibility of this agency was not "energy" but Nuclear Weapons production! In fact, if I remember correctly, the DOE was originally named something more accurate, but that was changed for PR reasons.

Of course, PR is also a large part of the DOE's mission. In testimony before Congress at the dawn of the nuclear age, scientists made it very clear that no amount of precaution would be great enough for the danger posed by nuclear waste. 27 millionths of a gram of Plutonium, if inhaled, causes lung cancer in 100 percent of cases. The half life is 150,000 years, and it takes 5 half lives to essentially be gone.

Nevertheless, production of nuclear weapons was "too..important." In Hanford Washington, there are over a hundred underground tanks full of liquid high level radioactive waste. Many are (were?) leaking, in sandy soil next to the Columbia river. In testimony before congress, a director of that site said while asking to build more tanks, "We are convinced that none has ever leaked..." a year AFTER the first leak was detected. This is criminal, and common history of the DOE.

One of the most effective PR ploys of the DOE (Nuclear Weapons Agency), was to push the idea of commercial nuclear power plants. People were told things like nuclear energy would be "too cheap to meter" and other lies, to give the public positive perceptions about the nuclear age. This propaganda continues to this day, and extremely dangerous nuclear power plants keep producing unthinkable waste. All this while the technology has long ago been developed to power the entire country with solar hydrogen. Does the "Department of Energy" put huge amounts of money into publicizing this fact? No. Does anyone at the DOE even care to find out about it? Probably not.

Instead, the nuclear weapons department has spent billions to "study" Yucca Mountain in order to convince itself, and the country, is a safe place to keep this stuff for the next million years! Actually, by the "law" handed down by Congress the DOE only has to "prove" it will cause "less than 1000 deaths in 10,000 years."

And so, riddled throughout the DOE Science and Engineering Report, are references to 10,000 years. 10,000 years. "We don't expect it to leak for 10,000 years." Do they mention why 10,000 years is the number they use throughout the report? Explain why that amount of time is not really adequate for waste that lasts a million years? Of course not. Even in the "draft" Environmental Impact Statement, the long range report is almost non-existent in that huge document.

Who cares? None of us will be around when this thing finally leaks. Our children's children children won't be around either. Even if humans have gone extinct by the time Yucca Mountain leaks, which is clearly admitted in Science and Engineering report to be expected to begin in (you guessed it) "10,000 years" our culture will have left a legacy of radioactive poison to the planet.

But what else can we do at this point? Isn't this the best option we have given the mess we have created (and continue creating)? I picked up the DOE's 2 page literature on "alternatives" to Yucca Mountain. These were presented in least realistic first and most useful LAST order, in characteristic propaganda style, to make it look as if we really don't have any other viable options. Not true. Transmutation is capable of converting long-lived radio-isotopes into short lived ones. This option is presented last, and the main argument against it is that it's "too expensive."

At the same time, the most plausible short-term option is not even

mentioned as an alternative. On-site monitored dry-cask storage is what has been used for the past few decades at nuclear power plants. If these facilities are not already safe (for long enough to gather funds for transmutation processing), then they should be made so. Obviously, the communities that these plants call home must consider them safely monitored, or else they would not be operating, right?

So, let the communities that "benefit" from these plants know how much money it will cost to process their nuclear waste into short lived forms, and see if they want to continue producing more of it? I would guess that people who have to clean up their own messes will stop making more of a mess very quickly.

That is, unless someone else will clean it up for them, which is exactly what these people think the DOE is going to do, in no small part because the DOE agreed to this in the very beginning. So, the huge waste disposal cost of nuclear power was put off, and agreed to be spread out among all federal tax payers, while the nuclear power companies rake in short term profits for their share holders, creating even more good PR for nuclear power, (in the investment community).

It's time that people wake up to this insanity, and start working to change the unfair laws which make this situation possible. Before I concluded, I will mention a few more glaring observations from the DOEs latest "reports" (propaganda) for Yucca Mountain.

- * Many things are "yet to be studied" including such critical aspects of the design as testing the waste pallets under seismic loads. (They do list the many earthquake faults nearby.)
- * The design is optimized for drainage, past "steel" I-beam supports.

 They admit this will be a problem since iron can react with plutonium to make it more easily transportable to the environment. This too is

left to be studied for future design revisions.

* Water travels quickly though cracks in rock. The design depends on the fact that the climate will not change significantly in this area, and it will remain quite dry. What a ridiculous assumption, given the global climate change which is already in progress. Does anyone doubt the landscape will be much different in half a million years? It might be significantly different within a few hundred years!

Of course, I didn't have time to study these huge reports in the detail that is "expected" given their huge number of references; but to be honest, the whole thing was so written in half-truth propaganda style, that I didn't have the stomach for it. I can only hope the lies are eventually exposed, and truth and sanity prevails.

This will take a shift in consciousness, however, since truth and sanity are currently pursued on the basis of money and power. In such context, this project will likely be accepted by the majority, over protests from the minority who have not already sold out...